

# S P E C I F I C A T I O N S



## IPS™ 150 Industrial Power Amplifier

### SPECIFICATIONS

#### CHARACTERISTICS

(@ 120 V AC, 60 Hz)

[Impedance Selector Setting]

#### Output Power: (typical value)

**Stereo mode, both channels driven**

4 ohms, 1 kHz, 1% THD

85 W RMS/chan [4 ohms]

8 ohms, 1 kHz, 1% THD

85 W RMS/chan [8 ohms] (25V)

16 ohms, 1 kHz, 1% THD

85 W RMS/chan [16 ohms]

**Bridge mode, mono**

8 ohms, 1 kHz, 1% THD

170 W RMS [4 ohms]

16 ohms, 1 kHz, 1% THD

170 W RMS [8 ohms]

32 ohms, 1 kHz, 1% THD

170 W RMS [16 ohms] (70 V)

#### Rated Output Power:

**Stereo mode, both channels driven**

4 ohms, 20 Hz to 20 kHz, 0.1% THD

75 W RMS per chan [4 ohms]

8 ohms, 20 Hz to 20 kHz, 0.07% THD

75 W RMS per chan [8 ohms] (25 V)

16 ohms, 20 Hz to 20 kHz, 0.05% THD

75 W RMS per chan [16 ohms]

**Bridge mode, mono**

8 ohms, 20 Hz to 20 kHz, 0.1% THD

150 W RMS [4 ohms]

16 ohms, 20 Hz to 20 kHz, 0.07% THD

150 W RMS [8 ohms]

32 ohms, 20 Hz to 20 kHz, 0.05% THD

150 W RMS [16 ohms] (70 V)

#### Distortion: (Typical value)

Stereo mode, both channels driven

20 Hz to 20 kHz, @ rated power & load

Below 0.1% [4 ohms],

Below 0.07% [8 ohms],

Below 0.05% [16 ohms]

#### Input Sensitivity & Impedance:

Input attenuator set FCW,

@ rated power & load

0.7 V RMS (-3 dBV) [4 ohms]

1.0 V RMS (0 dBV) [8 ohms]

1.4 V RMS (+3 dBV) [16 ohms]

20 kilohms (28 dB gain)

#### Slew Rate: (Typical value)

Stereo mode, each channel

15 Volts per uSec

Bridge mode, mono

30 Volts per uSec

#### Frequency Response: (Typical value)

Stereo mode, both channels driven

±1 dB, 1 W RMS @ rated load

10 Hz to 40 kHz

±0.2 dB, @ rated power & load

20 Hz to 20 kHz

#### Damping Factor: (typical value)

Stereo mode, both channels driven,

@ rated load, 1 kHz

Greater than 100 [4 ohms]

Greater than 200 [8 ohms]

Greater than 400 [16 ohms]

#### Hum & Noise:

Stereo mode, both channels driven

below rated power, unweighted

97 dB [4 ohms]

100 dB [8 ohms]

103 dB [16 ohms]

#### Power Consumption:

Stereo mode, both channels driven

@ rated power & load

2.5 A @ 120 V AC

#### Dimensions & Weight:

Height: 1.75" (4.4 cm)

Width: 19" (48.3 cm)

Depth: 8" (20.3 cm)

Weight: 22 lbs. (10.0 kg)

### FEATURES

- 19" rack-mountable
- One rack space
- 75 W RMS per channel
- 150 W RMS bridge mode
- Selectable 4, 8, or 16 ohms
- SPS™ compression each channel
- Electronics balanced inputs
- Convection cooled

#### Front Panel

- Heavy-duty rocker power switch
- LED power indicator
- SPS activation LED each channel

#### Rear Panel

- Barrier strip inputs
- Barrier strip outputs
- Detented 1 dB level controls
- Stereo/Bridge mode switch
- Impedance selector switch
- Ground lift switch

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ARCHITECTURAL ACOUSTICS®

## DESCRIPTION

The IPS™ 150 is a rugged, medium-power amplifier with features that make it stand alone in the industry. It's a rack-mountable unit which occupies only one rack space, and yet packs a 75 W RMS per channel punch into 4, 8, or 16 ohms. Yes that's right, its selectable; a feature seldom found on the typical solid state amp. In bridge mode, this unit delivers 150 W RMS into 8, 16, and 32 ohms. You might ask why 32 ohms; that's the load impedance for a 150 watt 70 volt distribution system. There's no fan in this unit to make noise. Adequate cooling is provided by two massive aluminum heat sinks. Each channel is protected from excessive operating temperatures with a thermal/fault system that is automatic, and only activates under extreme conditions.

The IPS 150 has Peavey's exclusive SPS compression system that senses conditions which might overload the amplifier and activates compression circuitry when clipping is imminent. This technique utilizes every precious watt available to power the speakers by designed toroidal power transformer with three different voltage taps. The rear panel 3-position selector switch then gives this amp the impedance selection capability by changing the internal "rail" operating voltages. Toroidal power transformers offer very efficient operation (cool), have very low magnetic fields (hum), and are relatively small in size (weight).

All controls are located on the rear panel, and each channel is equipped with a separate level control. The inputs are

electronic balanced. Both input and output are accessed via barrier strips.

High slew rate, high damping factor, low distortion, and awesome features make the IPS 150 the obvious choice for most demanding commercial/professional applications and permanent installations.

## ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The amplifier shall have two channels each capable of producing an output of more than 75 watts RMS into 4, 8, or 16 ohm loads, both channels operating from 20 Hz to 20 kHz continuously at less than 0.1% THD. In bridge mode the amplifier shall be capable of producing an output of more than 150 W RMS into 8, 16, or 32 ohm loads, operating from 20 Hz to 20 kHz continuously at less than 0.1% THD. Full output shall be achieved by an input signal of not more than 1.0 V RMS (0 dBV) per channel. Each channel shall be equipped with unique compression circuitry that electronically senses the onset of clipping and engages a specially designed circuit which virtually eliminates the possibility of driving the amplifier into clipping or distortion. A LED shall indicate when this patented SPS™ compression is activated.

Each channel shall have a +0, -1 dB frequency response from 10 Hz to 40 kHz @ 1 W RMS into 4 ohms and a +0, -0.2 dB frequency response from 20 Hz to 20 kHz @ 75 W RMS into 4 ohms, and shall have a slew rate of at least 15 volts per microsecond. The total harmonic distortion shall be less than 0.1% at 75 W RMS into 4 ohms from 20 Hz to 20 kHz, and the hum and noise shall be at least 100 dB below full rated output power measured 20 Hz to 20 kHz with a 600 ohm input termination.

The amplifier shall be stable into any load configuration with any combination of open or grounded input connections. It shall be short, mismatch, or open-circuit proof. It shall have massive aluminum heat sinks that are convection cooled and a thermal shutdown system to protect the amplifier from over-temperature operation. This thermal protection system shall be automatic and self-resetting.

The amplifier shall have all input and output patching capabilities on the rear panel. Each amplifier channel shall have an input barrier strip and an output barrier strip. Further, each channel shall contain a detented level control offering 1 dB per detent attenuation. Additionally the back panel shall contain switches for stereo/bridge select, impedance selection, and ground lift.

The front panel features shall include a rocker mains switch, an LED power indicator, and dual LED SPS activation indicators.

The unit shall be rack-mountable in a standard 19" rack requiring 1 3/4" height (one rack space). The unit weight shall be 22 lbs, with dimensions 19" wide x 1 3/4" high x 8" deep.

The amplifier shall operate on a 120 V AC, 50/60 Hz, and consume 300 watts. The published specifications shall be met or exceeded.

The amplifier shall be a Peavey IPS™ 150.

## LIMITED WARRANTY

Peavey Electronics Corporation warrants to the original purchaser of this new Architectural Acoustics product that it is free from defects in material and workmanship. If within one (1) year from date of purchase a properly installed product proves to be defective and Peavey is notified, Peavey will repair or replace it at no charge. (Note: Batteries and patch cords not covered.) "Original purchaser" means the customer for whom the product is originally installed.

Damage resulting from improper installation, interconnection of a unit or system of another manufacturer, accident or unreasonable use, neglect or any other cause not arising from defects in material and workmanship is not covered by this warranty. The warranty is valid only as to products purchased and installed in the United States.

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Peavey's liability to the original purchaser for damages for any cause whatsoever and regardless of the form of action is limited to the actual damages up to the greater of Five Hundred Dollars (\$500) or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. For information on service under this warranty, call a Peavey customer service representative at (601) 483-5376.



Features and specifications subject to change without notice.